

1    **ABSTRACT OF THE DISCLOSURE**

2           A silent and reduced vibration chainwheel includes a disk, multiple teeth  
3   and an energy absorber. The disk has an outer edge, two opposite sides and at  
4   least one recess. The teeth formed radially at and extend out from the outer edge  
5   of the disk. The energy absorber is made of resilient material and is mounted in  
6   the at least one recess at the outer edge of the disk to absorb the impact of a chain  
7   driven by or driving the chainwheel and reduce the noise and vibrations caused  
8   by the impact of the chain and the chainwheel. The energy absorber can be  
9   resilient annular rings, strips, rods or a combination of them. Therefore, the  
10   chainwheel is silent and fewer vibrations are produced so a person who uses a  
11   machine that has the chainwheel will feel comfortable.